

## **Monthly Report for July 2014**

*Submitted August 5, 2014*

### **General**

#### Staffing

The MLDS Center has had some success and unfortunately a few setbacks in staffing the vacant positions.

- OBIEE Developer - The recruitment for this position was successful and the new employee will start on Wednesday of this week (8/6).
- ETL Developer. An offer was made and accepted for this position. However, the individual selected changed his mind after his current employer made him an offer to stay that he “couldn’t refuse.” Staff is going back through resumes to re-start the interview process.
- Database Analyst - Three interviews have been conducted and one more interview is still pending.
- Web Developer - A contractor has been fulfilling the web development role for the past month and a half. However, due to health issues, the contractor asked to be taken off the project. The vendor is looking for a suitable replacement and the Center is actively recruiting for a permanent state employee.

In the meantime the Center is utilizing contractors at the Maryland State Department of Education (MSDE) to ensure necessary work is being completed.

#### Inter-Agency Agreements

Two meetings have taken place to resolve the outstanding issues necessary to complete the Data Sharing and Administrative agreements between the MLDS Center and the Department of Labor Licensing and Regulation (DLLR). The Data Sharing MOU has been completed and is currently being routed for signatures. The Administrative MOU is still being finalized. The last remaining issue concerns certain administrative details regarding the shared employee. There is broad agreement that the employee, whose position and funding is in the MLDS Center budget, will be located at DLLR, supervised by a DLLR employee, and assigned duties related data being transferred to MLDS Center and other work to benefit DLLR.

### **Meetings**

#### 2014 NCES Stats-DC Data Conference

The Stats-DC conference was held the week of July 30<sup>th</sup>. Several staff attended various parts of this conference that focused on various aspects of longitudinal data systems, including development, management, security and privacy, and research. Chandra Haislet and Chuck Shelton conducted a session that provided an overview of the Maryland system and some of the specific strategies being employed for data matching and security.

#### 21st Century Career Counseling Jobs Jam

Ross Goldstein attended the Career Counseling Jobs Jam. The event was co-sponsored by the U.S. Departments of Commerce and Labor. The purpose of this event was to bring together developers, data owners, and different policy experts to work together to come up with ideas for applications and technology tools that will help facilitate access to the job market for young adults. At the end of the day, the proposed

applications do not require the type of data being collected by the MLDS Center. Nonetheless, it was an interesting process with which to be involved.

## **Systems Management Branch**

### Data Center Installation

The MLDS Center is installing new servers and software that will comprise the data system. The plan had been to continue to have the system hosted at the Department of Public Safety and Correctional Services (DPSCS). Hosting at DPSCS made sense when developing the system because MSDE was simultaneously developing its systems. However, now that the development is at a different point MSDE provides a better solution because it is less expensive, more sustainable and offers greater control and access to the Center staff - but does not compromise security. Specifically, the following factors were considered:

1. Control - DPSCS provides a hosted solution versus the co-location model being presented by MSDE. The difference is that with the MSDE model, the Center has full control over its environment, including installation and setup of the servers and ongoing operation and maintenance. Under the hosting model, DPSCS would essentially be running the MLDS system in its environment. This means that servers, installation and certain design decisions would be determined by DPSCS, not the Center.
2. Cost - There are no direct hosting costs being assessed to the Center with either option. However, there are other cost impacts that favor the MSDE option. DPSCS primarily requires its vendors to do the installation and maintenance work on all equipment within its data center. Having to rely on vendors increases the MLDS Center costs (\$175/hr labor cost) while also creating a situation where the Center's work is subject to DPSCS' schedule and resources. In comparison, MSDE is providing in-house resources to provide technical assistance as well as training and staff development.
3. Sustainability – MLDS Center was appropriated several full time positions to hire staff necessary to independently build and maintain the system. The goal is to ensure system sustainability. The MSDE hosting model will help achieve this goal of having a system maintained by staff instead of relying on vendors. MLDS Center staff resources will be able to work directly on any servers and/or data issues to resolve them in much quicker and timely manner.
4. Mobility – Should future needs require the Center to move its systems to another location, that process would be much easier to accomplish using the MSDE co-location model, because the system would not be integrated with or otherwise be a part of another system.
5. Security - One of the reasons that DPSCS was selected as the host for the data center was due to its robust security. After careful review, it was determined that the MSDE data center, which maintains personally identifiable student data, provides equivalent physical and network security at its data center.
  - a. Network Security - Both MSDE and DPSCS use the same routers, switches, and firewalls. One advantage to MSDE is that it only requires the Center to maintain one level of user access control. The DPSCS model required a second layer of user access controls, which would be more cumbersome to maintain and potentially less secure due to the interdependencies between the two layers of access control, and because more staff would have access to the security controls. Simply trying to keep access control upgrades and changes synchronized can require full time staffing positions.
  - b. Physical Security
    - Both facilities have 24/7 security guards (armed at DPSCS and unarmed at MSDE) who control access to the building that houses the data center.
    - Both facilities require authorized access to the server room via a key card.

- Neither facility provides separate physical security for the Center equipment (i.e. a locked cage). This is an option we can implement at MSDE, if we determine it is necessary.
- Cameras are installed in both facilities. DPSCS has cameras in the server room whereas MSDE only has cameras at the entrance to the server room. The DPSCS camera installation is preferable and something MSDE would be willing to work with the Center to implement.
- Both facilities have comparable cooling, power, backup and fire suppression capabilities.

Because this was a significant change, the Governing Board's executive committee (Chancellor Kirwan, Secretary Howie, Acting Secretary Shultz, and Superintendent Lowery) were informed prior to implementing the decision.

#### System Development

The development of the system is substantially complete. The master data management system, the ODS database, and the data warehouse are built. Oracle has been upgraded and OBIEE integration has taken place. New data from the agencies is being loaded into the system.

#### **Policy and Information Services**

The team is working on a new web-design that will be consistent with State standards and also provide a clear organization as new dashboards are added. Plans are also being made for the first dashboards to be produced. The specifications for a data cube have been developed by Jon Enriquez that will be the basis for the initial dashboards.

#### **Research Services Branch**

Professors Gail Sunderman and Bob Croninger (University of Maryland, College Park) have produced a draft analysis and literature review on early childhood education policy. This work will be utilized for Research Agenda Question 17, which requires an assessment of training and retention of early childhood workforce in Maryland. Professor Marvin Titus is working on a literature review on the topic of how college grades affect workforce outcomes. Finally, work is also being done to finalize a paper on online education which will be used to address Research Agenda Question #5 regarding the need for inclusion of online education.